

Sub D1  
C1

42. (twice amended) A method for making an array of diverse materials, the method comprising

forming ten or more inorganic materials on ten or more predefined discrete regions of a rigid substrate, respectively, each of at least ten of the materials being different from each other and being formed by a method that comprises

delivering a first component of the material to the respective predefined discrete region of the substrate to form a first layer of the first component on the substrate,

delivering a second component of the material to the respective predefined discrete region to form a second layer of the second component on the first layer, and

varying the composition, concentration, stoichiometry or thickness of the delivered components between respective regions,

the substrate comprising a sufficient amount of space between the ten or more regions such that the delivered components do not substantially interdiffuse between the ten or more regions of the substrate.

Sub D2  
C2

68. (twice amended) A method for making an array of diverse materials, the method comprising

forming ten or more inorganic materials on ten or more predefined discrete regions of a rigid substrate, respectively, each of at least ten of the materials being different from each other and being formed by a method that comprises

delivering a first component of the material to the respective predefined discrete region of the substrate to form a first layer of the first component on the substrate,

delivering a second component of the material to the respective predefined discrete region to form a second layer of the second component on the first layer, and

varying the composition, concentration, stoichiometry or thickness of the delivered components between respective regions.

Sub 13  
C3

70. (twice amended) A method for making an array of diverse materials, the method comprising  
forming ten or more inorganic materials on ten or more predefined discrete regions of a substrate, respectively, each of at least ten of the materials being different from each other, and being formed by a method that comprises  
sequentially delivering five or more components of the material to the respective predefined discrete region of the substrate to form five or more layers of the delivered components, each of at least five of the delivered components being an inorganic element or compound, and  
varying the composition, concentration, stoichiometry or thickness of the delivered components between respective regions.

Sub D4  
C4

72. (twice amended) A method for identifying useful materials, the method comprising  
forming one hundred or more solid inorganic materials on one hundred or more predefined discrete regions of a rigid substrate, respectively, each of at least one hundred of the materials being different from each other and being formed by a method that comprises  
delivering a first component of the material to the respective predefined discrete region of the substrate to form a first layer of the first component on the substrate,  
delivering a second component of the material to the respective predefined discrete region to form a second layer of the second component on the first layer,  
varying the composition, concentration, stoichiometry or thickness of the delivered components between respective regions, and  
allowing the delivered first and second components of the material to simultaneously interact under a set of conditions,  
the substrate comprising the at least one hundred material-containing regions at a density of greater than about 10 regions per  $\text{cm}^2$ , the substrate further comprising a sufficient amount of space between the at least one hundred material-containing regions such that the delivered components do not substantially interdiffuse between the at least one hundred material-containing regions of the substrate.

sub 24  
cont  
and  
screening the at least ten different materials for one or more useful properties of interest,  
determining the relative performance of the at least ten different materials with respect  
to the property of interest.

sub 25  
15  
74. (amended) A method for identifying useful materials, the method comprising  
forming ten or more inorganic or non-biological polymeric materials on ten or more  
predefined discrete regions of a substrate, respectively, each of at least ten of the materials  
being composite materials that are different from each other and being formed by a method  
that comprises  
delivering a first component of the composite material to the respective  
predefined discrete region of the substrate to form a first layer of the first component on the  
substrate,  
delivering a second component of the composite material to the respective  
predefined discrete region to form a second layer of the second component on the first layer,  
and  
varying the composition, concentration, stoichiometry or thickness of the  
delivered components between respective regions,  
screening the at least ten different composite materials for one or more useful properties  
of interest, and  
determining the relative performance of the at least ten different composite materials  
with respect to the property of interest.

#### REMARKS

Claims 8, 10, 11, 15-24, 26, 30-35, 42, 43, 45-49, 51-56, 58-60, 64-72 and 74-80  
remain pending in the above-referenced patent application. Of these, claims 58 and 59 have  
been considered withdrawn as being drawn to non-elected species. The Applicants  
respectfully request further consideration of these claims.